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NOTES ON GEOGRAPHIC DISTRIBUTION

Distribution extension of *Hyalinobatrachium cappellei* (van Lidth de Jeude, 1904) (Anura: Centrolenidae) across Central Amazonia

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ABSTRACT: We report the occurrence of the centrolenid frog *Hyalinobatrachium cappellei* in Careiro, Amazonas, Brazil (Central Amazonia). Our records reduce a gap of approximately 1,500 km between the closest known records for this glassfrog, and confirm *H. cappellei* as geographically widespread in the Amazon Basin.

The glassfrog *Hyalinobatrachium cappellei* (van Lidth de Jeude, 1904) was described from the Saramacca river basin, Suriname, and later considered as a junior synonym of *Hyalinobatrachium fleischmanni* (Goin 1964). Recently, in an extensive review on the genus *Hyalinobatrachium*, Castroviejo-Fisher *et al.* (2011) used an integrative taxonomy approach in order to clarify the taxonomic relationships between these, and other similar species. The name *Hyalinobatrachium cappellei* was then resurrected, and the species *H. crurifasciatum*, *H. eccentricum* and *H. ignioculus* were all pointed as its junior synonyms. Apparently, *H. cappellei* has a widespread distribution in northern South America, especially across the Guiana Shield geological domain. However, the real extent of its geographic distribution in the Amazon Basin is still not clear.

The species was recently recorded (under the name *Hyalinobatrachium crurifasciatum*) in the southern limits of the Amazon Basin, in two localities in the state of Mato Grosso, Brazil (Rodrigues *et al.* 2010). This report strongly suggested that the distributional range of this centrolenid frog should include additional localities within the Basin, which comprises vast subsampled and/or unsampled areas. Here we communicate the first record of *Hyalinobatrachium cappellei* for the state of Amazonas, Brazil (Central Amazonia).

Individuals of *Hyalinobatrachium cappellei* (Figure 1) were found on two occasions during field work along the BR-319 road, in the Madeira-Purus interfluve, southwest of the city of Manaus (Figure 2). The area comprises poorly sampled areas of primary terra-firme forests and swamp lands in the municipality of Careiro, state of Amazonas. Along the road, several sampling sites have been established by the Brazilian Government Program for Biodiversity Research (PPBio – http://ppbio.inpa.gov.br), where biodiversity surveys are now conducted regularly. Our first *H. cappellei* record consists of one male found on January 2nd 2010 in the locality of Igapó-Açu, at the km 260 of BR-319 road, corresponding to site 5 of PPBio (coordinates 04°36'21" S, 61°14'56" W, 53 m above sea level). This individual was found at night, calling from the underside of a leaf of an epiphytic herb (family Araceae), hanging over a small stream about 2 m above water level. A small egg clutch (nine eggs) was found on the same leaf, also hanging from the underside surface. The stream was located in the northern trail, 1,000 m from the sampling site's edge.

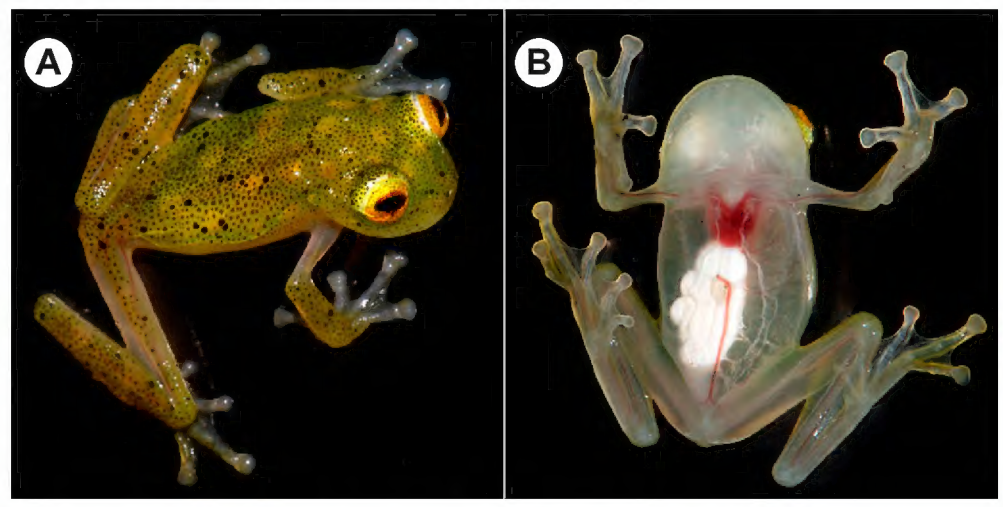

FIGURE 1. A) Dorsal view of male *Hyalinobatrachium cappellei* (INPA-H 28600) collected in February 2011, in the locality of Taquara, at the km 220 of BR-319 road, in the Municipality of Careiro, Amazonas. B) Ventral view of same specimen.

The second record consists of two males found on February 17th 2011, in the locality of Taquara, at the km 220 of BR-319 road, corresponding to site 4 of PPBio (coordinates 04°22'47" S, 60°56'23" W, 45 m above sea level). Both individuals were found calling at night from riparian vegetation over a small clear water stream, located about 500 m inside the northern trail from the research camp. Both individuals were calling from the upper side of leaves, the first about 1 m high, and the second about 3 m high. No egg clutches were found on the same or neighboring leaves.

The three specimens were deposited in the herpetology collections at Instituto Nacional de Pesquisas

da Amazônia, in Manaus, Brazil (INPA-H 25492, 28600, 28601). Collection permits were provided to A.P. Lima and F.B.R. Gomes by RAN-ICMBio/IBAMA (permits nº 13777-2 and 22612-1, respectively).

The present records of *Hyalinobatrachium cappellei* are located approximately 750 km southward of the closest northern record, in Venezuela (Myers and Donnelly 1997), and 672 km northward its record in Mato Grosso state (Figure 2). These findings partially fill the previous large geographic distribution gap of this species in Central Amazonia, confirming *H. cappellei* as geographically widespread in the Amazon Basin.

Figure 2. Known records of *Hyalinobatrachium cappellei* (van Lidth de Jeude, 1904). Red squares: the two new records, Municipality of Careiro, southwest of Manaus, Amazonas state, Brazil (this study). Yellow triangles: records in the Guiana Shield, based on geo-referenced vouchers analyzed by Castroviejo-Fisher *et al.* (2011). Sampling points in Suriname, including type locality at Saramacca River, are not shown due to lack of coordinates. Green dots: Two recent records in southern Amazonia (Rodrigues *et al.* 2010). Black lines are the hydrography, white lines the political boundaries, and colors in the background represent topography.

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